

Remarks

Further and favorable reconsideration is respectfully requested in view of the foregoing amendments and following remarks.

Thus, claims 1-3 have been cancelled, and claim 4 has been placed in independent form by incorporating the subject matter of claim 1, and also incorporates the subject matter of claim 6. Amended claim 4 also uses --which comprises-- instead of “characterized in that”, to place this claim in more conventional form according to U.S. practice.

Claims 5-6 have been cancelled.

Claim 7 has been amended to also place it in more conventional form by using --wherein-- instead of “characterized in that”.

Claim 8 has been amended in a manner similar to claim 4, by incorporating the subject matter of claims 1 and 6.

Claims 9 and 11-20 have been cancelled.

New claims 21-24 have been added to the application. These claims are directed to the subject matter of original claims 2 and 3, although they are dependent on claims 4 and 8.

The patentability of the presently claimed invention over the disclosure of the reference relied upon by the Examiner in rejecting the claims will be apparent upon consideration of the following remarks.

Thus, the rejection of claims 1-6, 8-14 and 17-20 under 35 U.S.C. §102(b) or 35 U.S.C. §103(a) based on Angeline (US 5,363,994), as well as the rejection of claims 7, 15 and 16 under 35 U.S.C. §103(a) as being unpatentable over this reference, as applied to the claims remaining after entry of the foregoing amendments, are respectfully traversed.

As indicated above, the claims to the water-based heat-radiation-preventive coating material (claims 1-3) have been cancelled; and the subject matter of claims 1 and 6 has been incorporated into claims 4 and 8, which upon entry of the foregoing amendments, will be the only independent claims remaining in the application.

The present invention is directed to a heat-radiation-preventive glass (claim 4) and a method of producing it (claim 8), wherein a heat-radiation-preventive coating film

formed from a coating layer of the aqueous composition containing a silane coupling agent is applied onto one side of a glass substrate so that the heat-radiation-preventive coating film has visible light transparency of 90% or more, solar-radiation heat absorptivity of 0.01 to 11% and radiation heat absorptivity within the wavelength band of heat radiation at ordinary temperature of 0.01 to 20%.

In order to achieve the desired heat-radiation-preventive effect, it is necessary to form the coating layer on the outermost surface of the glass substrate which contacts the air so as to radiate heat from said coating layer to the air.

On the other hand, the aqueous solution containing a silane coupling agent disclosed in Angeline is a primer composition for good adhesion between a substrate and a polymeric coating composition, i.e. the coating layer formed from the aqueous solution of Angeline never becomes an outermost layer. In other words, the aqueous solution of Angeline is entirely different from that of the present invention in the form of application.

Therefore, even if the primer composition of Angeline can be coated on a glass substrate, it was not obvious to a skilled person to apply the primary composition on an outermost surface of the glass substrate. In addition, it was not obvious to a skilled person to form a coating layer of the primer composition with a thickness within the range wherein the coating layer has visible light transparency of 90% or more, solar-radiation heat absorptivity of 0.01 to 11% and radiation heat absorptivity within the wavelength band of heat radiation at ordinary temperature of 0.01 to 20% based upon 100% of the glass substrate, as presently claimed.

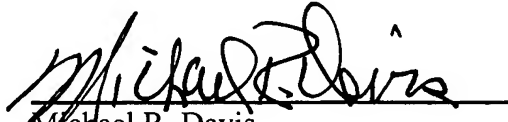
Furthermore, the subject matter of claim 10 is also unobvious over Angeline. That is, the reference does not disclose a glass plate having a coating film layer of an aqueous solution containing a silane coupling agent on its innermost surface for contacting air in a room. On the other hand, the method of preventing heat radiation from a glass plate of the present invention is characterized in that a coating film of the aqueous silane coupling agent solution formed on the innermost surface thereof contacting the air in a room has a heat-radiation-preventive effect.

For these reasons, Applicant takes the position that the presently claimed invention is clearly patentable over the applied reference.

Therefore, in view of the foregoing amendments and remarks, it is submitted that each of the grounds of rejection set forth by the Examiner has been overcome, and that the application is in condition for allowance. Such allowance is solicited.

Respectfully submitted,

Masami KUJIRAI

By: 
Michael R. Davis
Registration No. 25,134
Attorney for Applicant

MRD/pth
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
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